Complete Summary

GUIDELINE TITLE

Screening for gonorrhea: recommendation statement.

BIBLIOGRAPHIC SOURCE(S)

U.S. Preventive Services Task Force (USPSTF). Screening for gonorrhea: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2005. 11 p. [13 references]

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previously published guideline: U.S. Preventive Services Task Force. Guide to clinical preventive services. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. Chapter 27, Screening for gonorrhea - including ocular prophylaxis in newborns. p. 293-302. [52 references]

COMPLETE SUMMARY CONTENT

SCOPE
METHODOLOGY - including Rating Scheme and Cost Analysis
RECOMMENDATIONS
EVIDENCE SUPPORTING THE RECOMMENDATIONS
BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS
QUALIFYING STATEMENTS
IMPLEMENTATION OF THE GUIDELINE
INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES
IDENTIFYING INFORMATION AND AVAILABILITY
DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Gonorrhea

GUIDELINE CATEGORY

Prevention
Screening

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Obstetrics and Gynecology
Pediatrics
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Clinical Laboratory Personnel
Health Care Providers
Health Plans
Managed Care Organizations
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To summarize the U.S. Preventive Services Task Force (USPSTF) recommendations on screening for gonorrhea and the supporting scientific evidence
- To update the 1996 recommendations contained in the Guide to Clinical Preventive Services, Second Edition

TARGET POPULATION

Asymptomatic adolescents, adults, and pregnant women/neonates seen in primary care

INTERVENTIONS AND PRACTICES CONSIDERED

Screening/Prevention

1. Screening tests for genital gonorrhea infection (e.g., culture, nucleic acid amplification, and nucleic acid hybridization [nucleic acid probes])
2. Prophylactic ocular topical medication for all newborns

Interventions Discussed but not Recommended

Antibiotic therapy

MAJOR OUTCOMES CONSIDERED

Asymptomatic Men and Women Including Adolescents

- Key Question 1A: Does screening women reduce complications and transmission of disease?
- Key Question 1B: Does screening men reduce complications and transmission of disease?

- Key Question 2A: What individual-level risk factors identify groups at higher risk for gonococcal infection?
- Key Question 2B: What population-level characteristics identify groups at higher risk for gonococcal infection?
- Key Question 2C: What individual-level risk factors identify groups at higher risk for gonococcal infection when used in conjunction with population-level or provider-level characteristics?
- Key Question 2D: What are the screening tests and their performance characteristics?
- Key Question 2E and 2F: What is the yield of screening in different risk populations? Does performance of screening tests vary by specimen type?
- Key Question 2G: What is the role of screening for gonococcal infection among men who have sex with men (MSM)?
- Key Question 3A: What is the evidence on cost effectiveness for universal vs. targeted strategies?
- Key Question 3B: Are dual chlamydia-gonorrhea screening tests cost-effective?

Pregnant Women

- Key Question 1A: Does screening reduce adverse maternal/pregnancy outcomes (septic abortion, stillbirth, preterm delivery/low birth weight)?
- Key Question 1B: Does screening reduce adverse neonatal outcomes (gonococcal conjunctivitis, blindness)?
- Key Question 2A: Does screening reduce maternal complications (chorioamnionitis, premature rupture of membranes, preterm labor)?
- Key Question 2B: Does screening reduce transmission to the newborn?
- Key Question 3: What is the evidence on cost effectiveness for universal vs. targeted strategies?

Newborn Chemoprophylaxis

Key Question 1: What are the adverse effects of treatment?

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Hand-searches of Published Literature (Primary Sources)
Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A targeted review of the literature was prepared by the Oregon Evidence-based Practice Center (EPC) for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Companion Documents" field).

The topic of gonorrhea was searched in the MEDLINE® database (January 1966 through July 2004) by a research librarian. A total of nine searches were performed on prevalence, screening programs, risk factors, screening tests and

test performance, and cost. Searches specifically related to pregnancy included maternal and neonatal complications and outcomes. A specific search on neonatal chemoprophylaxis was also performed. Detailed electronic search strategies are presented in Appendix 1 of the original guideline document. Periodic hand searching of relevant medical journals and reference lists, and suggestions from experts supplemented the electronic searches. Relevant systematic reviews, policy statements, and other papers with contextual value were also obtained.

Inclusion and Exclusion Criteria

English-language abstracts were dual-reviewed for eligibility. Only studies published in 1996 or later were included in this update. Papers were selected for full review if the abstracts were about screening strategies in the target populations; individual and population-level risk factors; characteristics and accuracy of tests used for screening; adverse effects of chemoprophylaxis treatment for newborns; as well as evidence on cost effectiveness for universal and targeted screening strategies. Studies were included if they were conducted in the U.S., Australia, Canada, and Western Europe because of similar epidemiology and management of gonorrhea in these countries. Studies of non-human subjects and those without original data were excluded. Foreign language papers were considered if they were randomized controlled trials related to a key question and the abstract was in English.

Studies of screening strategies and programs were included if they met additional criteria. Screening is defined as testing in asymptomatic persons, and "case finding" in those found to have another sexually transmitted infection. Universal screening means testing everyone regardless of symptoms or risk factors; targeted screening indicates that only those who meet specific criteria are tested. Studies about screening programs were included if they described the study population (number screened, sex, age range, setting, presence of symptoms, and other available socio-demographic factors), features of the screening program (duration, type of testing, follow-up), and outcome measures.

Studies of risk factors for gonococcal infection were included if they reported the number screened, sex, age, setting, reason for visit, screening criteria (universal vs. targeted), type of gonococcal test, other forms of data collection (e.g., questionnaire), and prevalence rates of the tested populations. Results included odds ratios for gonococcal infection from univariate or multivariate regression analysis and significance levels for comparisons between infected and non-infected women and/or men. Risk factors that were not significantly related to gonococcal infection were noted when reported.

This review focused on the new nucleic acid amplification tests obtained by both swab and urine specimens published since 1996. Studies of test performance were included in the summary table only if they met quality criteria at the fair or good-quality level including: 1) the test was appropriately performed in a standardized manner; 2) the gold standard was appropriately used; 3) the study population was adequately described; and 4) data were sufficient to determine the sensitivity and specificity of tests. Outcome measures included sensitivity, specificity, positive predictive value, and negative predictive value of tests evaluated.

NUMBER OF SOURCE DOCUMENTS

Investigators reviewed 1,576 abstracts identified by the searches (see Appendix 3 in the original guideline document). From the searches, 310 full-text articles were reviewed. An additional 12 non-duplicate articles identified from reference lists and experts were also reviewed.

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

The U.S. Preventive Services Task Force (USPSTF) grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good

Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair

Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor

Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review with Evidence Tables

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Note from the National Guideline Clearinghouse (NGC): A targeted review of the literature was prepared by the Oregon Evidence-based Practice Center (EPC) for the Agency for Healthcare Research and Quality (AHRQ) for use by the U.S. Preventive Services Task Force (USPSTF) (see the "Companion Documents" field).

Relevant data were extracted from each study and summarized in evidence tables. In general, these include descriptions of the study population and setting, characteristics of the screening program or test, and outcomes. Studies of risk factors reported associations between infections and risk factors. Predefined criteria from the U.S. Preventive Services Task Force (USPSTF) were used to assess the internal validity of included systematic reviews, randomized controlled

trials, and observational studies (see Appendix 2 in the original guideline document). Studies were also considered for applicability to the population that would be identified by screening.

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Balance Sheets
Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

When the overall quality of the evidence is judged to be good or fair, the U.S. Preventive Services Task Force (USPSTF) proceeds to consider the magnitude of net benefit to be expected from implementation of the preventive service. Determining net benefit requires assessing both the magnitude of benefits and the magnitude of harms and weighing the two.

The USPSTF classifies benefits, harms, and net benefits on a 4-point scale: "substantial," "moderate," "small," and "zero/negative."

"Outcomes tables" (similar to "balance sheets") are the USPSTF's standard resource for estimating the magnitude of benefit. These tables, prepared by the topic teams for use at USPSTF meetings, compare the condition specific outcomes expected for a hypothetical primary care population with and without use of the preventive service. These comparisons may be extended to consider only people of specified age or risk groups or other aspects of implementation. Thus, outcomes tables allow the USPSTF to examine directly how the preventive service affects benefits for various groups.

When evidence on harms is available, the topic teams assess its quality in a manner like that for benefits and include adverse events in the outcomes tables. When few harms data are available, the USPSTF does not assume that harms are small or nonexistent. It recognizes a responsibility to consider which harms are likely and judge their potential frequency and the severity that might ensue from implementing the service. It uses whatever evidence exists to construct a general confidence interval on the 4-point scale (e.g., substantial, moderate, small, and zero/negative).

Value judgments are involved in using the information in an outcomes table to rate either benefits or harms on the USPSTF's 4-point scale. Value judgments are also needed to weigh benefits against harms to arrive a rating of net benefit.

In making its determinations of net benefit, the USPSTF strives to consider what it believes are the general values of most people. It does this with greater confidence for certain outcomes (e.g., death) about which there is little disagreement about undesirability, but it recognizes that the degree of risk people are willing to accept to avert other outcomes (e.g., cataracts) can vary considerably. When the USPSTF perceives that preferences among individuals vary greatly, and that these variations are sufficient to make trade-off of benefits and harms a "close-call," then it will often assign a C recommendation (see the

"Recommendation Rating Scheme" field). This recommendation indicates the decision is likely to be sensitive to individual patient preferences.

The USPSTF uses its assessment of the evidence and magnitude of net benefit to make recommendations. The general principles the USPSTF follows in making recommendations are outlined in Table 5 of the companion document cited below. The USPSTF liaisons on the topic team compose the first drafts of the recommendations and rationale statements, which the full panel then reviews and edits. Recommendations are based on formal voting procedures that include explicit rules for determining the views of the majority.

From: Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):21-35.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations according to one of 5 classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A

The USPSTF strongly recommends that clinicians provide [the service] to eligible patients. The USPSTF found good evidence that [the service] improves important health outcomes and concludes that benefits substantially outweigh harms.

B

The USPSTF recommends that clinicians provide [the service] to eligible patients. The USPSTF found at least fair evidence that [the service] improves important health outcomes and concludes that benefits outweigh harms.

C

The USPSTF makes no recommendation for or against routine provision of [the service]. The USPSTF found at least fair evidence that [the service] can improve health outcomes but concludes that the balance of benefits and harms is too close to justify a general recommendation.

D

The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I

The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that [the service] is effective is

lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.

COST ANALYSIS

Asymptomatic Men and Women including Adolescents

What is the evidence for cost effectiveness for universal vs. targeted strategies?

One modeling study reviewed consisted of a decision analysis comparing standard emergency department (ED) screening practice for Chlamydia and gonorrhea to four enhanced screening strategies in a theoretical cohort of 10,000 female and male patients aged 18 to 31 years. The five screening strategies included: 1) standard practice in which emergency clinicians rely on history and physical examination to decide whether to screen and treat; 2) universal screening; 3) selective screening for patients with risk factors combined with standard ED practice; 4) screening all patients aged 18 to 31 years combined with standard ED practice; 5) mass treatment of all patients aged 18 to 31 years with antibiotics (e.g., single dose of 1 gm azithromycin and 500 mg ciprofloxacin). The outcomes were untreated gonorrhea or chlamydia cases and their sequelae, transmission to a partner, congenital outcomes, and cost to prevent a case of gonorrhea or chlamydia.

For women, each enhanced screening strategy was associated with less costs for clinical sequelae because of greater numbers of detected and treated infections than standard practice. Including programmatic costs and overhead, mass treatment of all women aged 18 to 31 years was the most cost-saving strategy and involved treatment of the most cases. Even with the side effects of medication accounted for, treating all women aged 18 to 31 years saved $436.54 per case treated compared with standard practice, and resulted in treatment of 1,005 additional cases of gonorrhea and chlamydia. In this modeling exercise, screening all women aged 18 to 31 years for both chlamydia and gonorrhea was found to be more cost effective than selective screening when the combined prevalence of gonorrhea and chlamydia was 7% to 17.5%.

For men, standard ED practice for detection and treatment of gonorrhea and chlamydia was more cost-saving than enhanced screening. This is most likely related to the lower costs of treatment and management of infections in men missed by screening, and the higher rates of symptomatic infections.

Although mass treatment without testing for gonorrhea and chlamydia was found to cost less for women in this analysis, the generalizability of this finding is limited because the study focused on an urban ED serving a high prevalence population. In considering the study's relevance to gonorrhea screening, it should be remembered that the reported savings are likely to have been driven by chlamydia with its higher prevalence rates. While this study did not consider the potential costs of antibiotic resistance associated with mass treatment, it also did not consider the acceptability of mass treatment to both patients and health care providers.

Are dual chlamydia-gonorrhea screening tests cost-effective?

No studies meeting inclusion criteria addressed this question.

Pregnant Women

What is the evidence on cost effectiveness for universal vs. targeted strategies?

No studies meeting inclusion criteria addressed this question.

METHOD OF GUIDELINE VALIDATION

Comparison with Guidelines from Other Groups
External Peer Review
Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Peer Review. Before the U.S. Preventive Services Task Force (USPSTF) makes its final determinations about recommendations on a given preventive service, the Evidence-based Practice Center and the Agency for Healthcare Research and Quality send a draft systematic evidence review to 4 to 6 external experts and to federal agencies and professional and disease-based health organizations with interests in the topic. They ask the experts to examine the review critically for accuracy and completeness and to respond to a series of specific questions about the document. After assembling these external review comments and documenting the proposed response to key comments, the topic team presents this information to the Task Force in memo form. In this way, the Task Force can consider these external comments and a final version of the systematic review before it votes on its recommendations about the service. Draft recommendations are then circulated for comment from reviewers representing professional societies, voluntary organizations, and Federal agencies. These comments are discussed before the whole USPSTF before final recommendations are confirmed.

Recommendation of Others. Recommendations for screening for gonorrhea from the following groups were discussed: the American Academy of Family Physicians (AAFP), the American College of Obstetricians and Gynecologists (ACOG), the American Academy of Pediatrics (AAP), the Department of Defense (DoD), the Centers for Disease Control and Prevention (CDC), and the Infectious Disease Society of America (IDSA).

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The U.S. Preventive Services Task Force (USPSTF) grades its recommendations (A, B, C, D, or I) and the quality of the overall evidence for a service (good, fair, poor). The definitions of these grades can be found at the end of the "Major Recommendations" field.

The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians screen all sexually active women, including those who are pregnant, for gonorrhea

infection if they are at increased risk for infection (that is, if they are young or have other individual or population risk factors; see Clinical Considerations for further discussion of risk factors). B recommendation

Women with asymptomatic gonorrhea infection have high morbidity due to pelvic inflammatory disease, ectopic pregnancy, and chronic pelvic pain. Pregnant women with gonorrhea infection are at risk for preterm rupture of membranes, preterm labor, and chorioamnionitis. There is fair evidence that screening tests can accurately detect gonorrhea infection and good evidence that antibiotics can cure gonorrhea infection. There is fair evidence that screening pregnant women at high risk for gonorrhea, including women at high risk because of younger age, may prevent other complications associated with gonococcal infection during pregnancy, such as preterm delivery and chorioamnionitis. Potential harms of screening and treatment for gonorrhea include false-positive test results, anxiety, and unnecessary antibiotic use. There is insufficient evidence (due to a lack of studies) to quantify the magnitude of these potential harms. The USPSTF judges the magnitude of the potential harms to be small. The USPSTF concludes that the benefits of screening women at increased risk for gonorrhea infection outweigh the potential harms.

The USPSTF found insufficient evidence to recommend for or against routine screening for gonorrhea infection in men at increased risk for infection (see Clinical Considerations for discussion of risk factors). I recommendation

The morbidity from undiagnosed and untreated genital gonorrhea infection is lower in men than in women. Clinical symptoms are more likely to lead to diagnosis and treatment in men; thus, the prevalence of asymptomatic infection in men is lower. There is fair evidence that non-invasive screening tests can accurately detect gonorrhea infection and good evidence that antibiotics cure gonorrhea infection. Potential harms of screening and treatment for gonorrhea include false-positive test results, anxiety, and unnecessary antibiotic use. There is insufficient evidence (due to a lack of studies) to quantify the magnitude of these potential harms. The USPSTF judges the magnitude of the potential harms of screening men for gonorrhea to be small. Given the low prevalence of asymptomatic infection in men, the USPSTF could not determine the balance of benefits and harms of screening for gonorrhea infection in men at increased risk for infection.

The USPSTF recommends against routine screening for gonorrhea infection in men and women who are at low risk for infection (see Clinical Considerations for discussion of risk factors). D recommendation

There is a low prevalence of gonorrhea infection in the general population and consequently a low yield from screening. Thus, the USPSTF concludes that potential harms of screening (i.e., false-positive test results and labeling) in low-prevalence populations outweigh the benefits.

The USPSTF found insufficient evidence to recommend for or against routine screening for gonorrhea infection in pregnant women who are not at increased risk for infection (see Clinical Considerations for discussion of risk factors). I recommendation

The prevalence of gonorrhea infection in pregnant women who are not at increased risk for infection is low. The USPSTF could not determine the balance between benefits and harms of screening for gonorrhea in pregnant women who are not at increased risk for infection.

The USPSTF strongly recommends prophylactic ocular topical medication for all newborns against gonococcal ophthalmia neonatorum. A recommendation.

There is good evidence that blindness due to gonococcal ophthalmia neonatorum has become rare in the United States since the implementation of universal preventive medication of infants.

Clinical Considerations

- Women and men under the age of 25--including sexually active adolescents--are at highest risk for genital gonorrhea infection. Risk factors for gonorrhea include a history of previous gonorrhea infection, other sexually transmitted infections, new or multiple sexual partners, inconsistent condom use, sex work, and drug use. Risk factors for pregnant women are the same as for non-pregnant women. Prevalence of gonorrhea infection varies widely among communities and patient populations. African Americans and men who have sex with men have a higher prevalence of infection than the general population in many communities and settings.
- Individual risk depends on the local epidemiology of disease. Local public health authorities provide guidance to clinicians to help identify populations who are at increased risk in their communities. In communities with a high prevalence of gonorrhea, broader screening of sexually active young people may be warranted, especially in settings serving individuals who are at increased risk. Additionally, clinicians may want to consider other population-based risk factors, including residence in urban communities and communities with high rates of poverty, when making screening decisions. Low community prevalence of gonorrhea infection may justify more targeted screening.
- Screening is recommended at the first prenatal visit for pregnant women who are in a high risk group for gonorrhea infection. For pregnant patients who are at continued risk, and for those who acquire a new risk factor, a second screening should be conducted during the third trimester. The optimal interval for screening in the non-pregnant population is not known.
- Vaginal culture remains an accurate screening test when transport conditions are suitable. Newer screening tests, including nucleic acid amplification tests and nucleic acid hybridization tests, have demonstrated improved sensitivity and comparable specificity when compared with cervical culture. Some newer tests can be used with urine and vaginal swabs, which enables screening when a pelvic examination is not performed.
- Appropriate treatment of gonorrhea infection and administration of prophylactic medication to newborns have been outlined by the Centers for Disease Control and Prevention (CDC) (http://www.cdc.gov/std/treatment/4-2002TG.htm#Gonococcal). Genital infection in men and women may be treated with a third generation cephalosporin or fluoroquinolone, and pregnant women may be treated with third generation cephalosporins. Because of emerging fluoroquinolone resistance, the CDC issued new treatment guidelines in 2004 recommending that men who have sex with men and those who acquired an infection in California, Hawaii, or Asia not be

treated with fluoroquinolone antibiotics. If clinicians have not concurrently screened for chlamydial infection, the CDC recommends presumptive treatment for chlamydia at the time of treatment for gonorrhea. In order to prevent recurrent transmission, partners of infected individuals should be tested and treated if infected, or treated presumptively.

- Gonorrhea is a nationally reportable condition. More complete reporting of gonorrhea cases to public health authorities will permit more accurate estimations of gonorrhea prevalence. Improved information will allow clinicians to screen for gonorrhea in ways that improve the balance between benefits and harms for their patients.
- Research priorities for gonorrhea screening include greater understanding of the benefits of screening men at increased risk, especially men who have sex with men, and the role of reporting on gonorrhea rates and testing priorities.
- See other USPSTF recommendations on screening for sexually transmitted infections (chlamydial infection, hepatitis B and C virus infection, HIV, genital herpes simplex, and syphilis) at http://www.ahrq.gov/clinic/cps3dix.htm#infectious.

Definitions:

Strength of Recommendations

The USPSTF grades its recommendations according to one of 5 classifications (A, B, C, D, I) reflecting the strength of evidence and magnitude of net benefit (benefits minus harms):

A

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D

The USPSTF recommends against routinely providing [the service] to asymptomatic patients. The USPSTF found at least fair evidence that [the service] is ineffective or that harms outweigh benefits.

I

The USPSTF concludes that the evidence is insufficient to recommend for or against routinely providing [the service]. Evidence that [the service] is effective is lacking, of poor quality, or conflicting and the balance of benefits and harms cannot be determined.

Strength of Evidence

The U.S. Preventive Services Task Force (USPSTF) grades the quality of the overall evidence for a service on a 3-point scale (good, fair, poor):

Good

Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

Fair

Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of the individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

Poor

Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is identified in the "Major Recommendations" field.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate screening for genital gonorrhea infection. Appropriate screening may detect the presence of asymptomatic gonorrhea infection and allow for treatment before harmful sequelae such as pelvic inflammatory disease are experienced.

Additionally appropriate screening may lead to a decreased prevalence of gonorrhea in a community as a result of decreased sexual transmission by asymptomatic individuals.

POTENTIAL HARMS

No study has directly examined the harms of screening or treatment for gonorrhea infection. Potential harms of screening may include opportunity costs to the clinician and patient (time, resources, etc.) and false-positive test results that may lead to stress, labeling, and further testing. Even using a test with a specificity of 99% in a population at high risk for gonorrhea with a prevalence of 0.5%, two thirds of positive screening tests would be expected to be false positive results. Harms of treatment include adverse drug-related effects.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- Recommendations made by the U.S. Preventive Services Task Force are independent of the U.S. Government. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.
- Limitations of the Evidence: The evidence is limited by the descriptive, cross-sectional nature of the majority of the studies and the focus of research in high prevalence communities and settings, such as inner city sexually transmitted disease (STD) clinics. Very few studies present data applicable to a general, asymptomatic population. Studies of tests are limited in many ways including use of inappropriate and dissimilar reference standards and populations. This heterogeneity prohibits meta-analysis or comparisons between tests.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

The experiences of the first and second U.S. Preventive Services Task Force (USPSTF), as well as that of other evidence-based guideline efforts, have highlighted the importance of identifying effective ways to implement clinical recommendations. Practice guidelines are relatively weak tools for changing clinical practice when used in isolation. To effect change, guidelines must be coupled with strategies to improve their acceptance and feasibility. Such strategies include enlisting the support of local opinion leaders, using reminder systems for clinicians and patients, adopting standing orders, and audit and feedback of information to clinicians about their compliance with recommended practice.

In the case of preventive services guidelines, implementation needs to go beyond traditional dissemination and promotion efforts to recognize the added patient and clinician barriers that affect preventive care. These include clinicians' ambivalence about whether preventive medicine is part of their job, the psychological and practical challenges that patients face in changing behaviors, lack of access to

health care or of insurance coverage for preventive services for some patients, competing pressures within the context of shorter office visits, and the lack of organized systems in most practices to ensure the delivery of recommended preventive care.

Dissemination strategies have changed dramatically in this age of electronic information. While recognizing the continuing value of journals and other print formats for dissemination, the Agency for Healthcare Research and Quality will make all U.S. Preventive Services Task Force (USPSTF) products available through its Web site. The combination of electronic access and extensive material in the public domain should make it easier for a broad audience of users to access U.S. Preventive Services Task Force materials and adapt them for their local needs. Online access to U.S. Preventive Services Task Force products also opens up new possibilities for the appearance of the annual, pocket-size Guide to Clinical Preventive Services.

To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site, typically requiring the redesign of systems of care. Such a systems approach to prevention has had notable success in established staff-model health maintenance organizations, by addressing organization of care, emphasizing a philosophy of prevention, and altering the training and incentives for clinicians. Staff-model plans also benefit from integrated information systems that can track the use of needed services and generate automatic reminders aimed at patients and clinicians, some of the most consistently successful interventions. Information systems remain a major challenge for individual clinicians' offices, however, as well as for looser affiliations of practices in network-model managed care and independent practice associations, where data on patient visits, referrals, and test results are not always centralized.

IMPLEMENTATION TOOLS

Foreign Language Translations
Patient Resources
Pocket Guide/Reference Cards
Tool Kits

For information about availability, see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

U.S. Preventive Services Task Force (USPSTF). Screening for gonorrhea: recommendation statement. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2005. 11 p. [13 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2005 May 31

GUIDELINE DEVELOPER(S)

United States Preventive Services Task Force - Independent Expert Panel

SOURCE(S) OF FUNDING

Agency for Healthcare Research and Quality

GUIDELINE COMMITTEE

U.S. Preventive Services Task Force (USPSTF)

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Corresponding Author: Ned Calonge, MD, MPH, Chair, U.S. Preventive Services Task Force (USPSTF), c/o Program Director, USPSTF, Agency for Healthcare Research and Quality

Task Force Members*: Ned Calonge, MD, MPH, Chair, USPSTF (Acting Chief Medical Officer and State Epidemiologist, Colorado Department of Public Health and Environment, Denver, CO); Diana B. Petitti, MD, MPH, Vice-chair, USPSTF (Senior Scientific Advisor for Health Policy and Medicine, Regional Administration, Kaiser Permanente Southern California, Pasadena, CA); Janet D. Allan, PhD, RN, CS, (Dean, School of Nursing, University of Maryland Baltimore, Baltimore, MD); Alfred O. Berg, MD, MPH, (Professor and Chair, Department of Family Medicine, University of Washington, Seattle, WA); Paul S. Frame, MD (Tri-County Family Medicine, Cohocton, NY, and Clinical Professor of Family Medicine, University of Rochester, Rochester, NY); Joxel Garcia, MD, MBA, (Deputy Director, Pan American Health Organization, Washington, DC); Leon Gordis, MD, MPH, DrPH (Professor, Epidemiology Department, Johns Hopkins Bloomberg School of Public Health, Baltimore MD); Kimberly D. Gregory, MD, MPH (Director, Women's Health Services Research and Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, Cedars-Sinai Medical Center, Los Angeles, CA); Russell Harris, MD, MPH (Associate Professor of Medicine, Sheps Center for Health Services Research,

University of North Carolina School of Medicine, Chapel Hill, NC); Mark S. Johnson, MD, MPH (Professor and Chair, Department of Family Medicine, University of Medicine and Dentistry of New Jersey-New Jersey Medical School, Newark, NJ); Jonathan D. Klein, MD, MPH (Associate Professor, Department of Pediatrics, University of Rochester School of Medicine, Rochester, NY); Carol Loveland-Cherry, PhD, RN (Executive Associate Dean, Office of Academic Affairs, University of Michigan School of Nursing, Ann Arbor, MI); Virginia A. Moyer, MD, MPH (Professor, Department of Pediatrics, University of Texas Health Sciences Center, Houston, TX); Judith K. Ockene, PhD (Professor of Medicine and Chief of Division of Preventive and Behavioral Medicine, University of Massachusetts Medical School, Worcester, MA); Albert L. Siu, MD, MSPH (Professor and Chairman, Brookdale Department of Geriatrics and Adult Development, Mount Sinai Medical Center, New York, NY); Steven M. Teutsch, MD, MPH (Executive Director, Outcomes Research and Management, Merck & Company, Inc., West Point, PA); and Barbara P. Yawn, MD, MSc (Director of Research, Olmstead Research Center, Rochester, MN)

*Members of the USPSTF at the time this recommendation was finalized. For a list of current Task Force members, go to www.ahrq.gov/clinic/uspstfab.htm.

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The U.S. Preventive Services Task Force has an explicit policy concerning conflict of interest. All members and evidence-based practice center (EPC) staff disclose at each meeting if they have an important financial conflict for each topic being discussed. Task Force members and EPC staff with conflicts can participate in discussions about evidence, but members abstain from voting on recommendations about the topic in question.

From: Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):21-35.

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previously published guideline: U.S. Preventive Services Task Force. Guide to clinical preventive services. 2nd ed. Baltimore (MD): Williams & Wilkins; 1996. Chapter 27, Screening for gonorrhea - including ocular prophylaxis in newborns. p. 293-302. [52 references]

GUIDELINE AVAILABILITY

Electronic copies: Available from the U.S. Preventive Services Task Force (USPSTF) Web site.

Print copies: Available from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse. For more information, go to http://www.ahrq.gov/news/pubsix.htm or call 1-800-358-9295 (U.S. only).

AVAILABILITY OF COMPANION DOCUMENTS

The following are available:

- Glass N, Nelson ND, Villemyer K. Screening for gonorrhea: update of the evidence. Portland (OR); Agency for Healthcare Research and Quality (AHRQ); 2005. 31 p.

  Electronic copies: Available from the U.S. Preventive Services Task Force (USPSTF) Web site.

Background Articles:

- Woolf SH, Atkins D. The evolving role of prevention in health care: contributions of the U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):13-20.
- Harris RP, Helfand M, Woolf SH, Lohr KN, Mulrow, CD, Teutsch SM, Atkins D. Current methods of the U.S. Preventive Services Task Force: a review of the process. Methods Work Group, Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):21-35.
- Saha S, Hoerger TJ, Pignone MP, Teutsch SM, Helfand M, Mandelblatt JS. The art and science of incorporating cost effectiveness into evidence-based recommendations for clinical preventive services. Cost Work Group of the Third U.S. Preventive Services Task Force. Am J Prev Med 2001 Apr;20(3S):36-43.

Electronic copies: Available from U.S. Preventive Services Task Force (USPSTF) Web site.

The following are also available:

- The guide to clinical preventive services, 2005. Recommendations of the U.S. Preventive Services Task Force. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ), 2005. 192 p. Electronic copies available from the AHRQ Web site.

Print copies: Available from the Agency for Healthcare Research and Quality Publications Clearinghouse. For more information, go to http://www.ahrq.gov/news/pubsix.htm or call 1-800-358-9295 (U.S. only).

The Interactive Preventive Services Selector tool, which enables users to search USPSTF recommendations by patient age, sex, and pregnancy status, is available as a web-based version or PDA application. It is available from the AHRQ Web site.

PATIENT RESOURCES

The following is available:

- The pocket guide to good health for adults. Rockville (MD): Agency for Healthcare Research and Quality (AHRQ); 2003.

Electronic copies: Available from the U.S. Preventive Services Task Force (USPSTF) Web site. Copies also available in Spanish from the USPSTF Web site.

Print copies: Available from the Agency for Healthcare Research and Quality (AHRQ) Publications Clearinghouse. For more information, go to http://www.ahrq.gov/news/pubsix.htm or call 1-800-358-9295 (U.S. only).

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NGC STATUS

This NGC summary was completed by ECRI on May 24, 2005. The information was verified by the guideline developer on May 26, 2005.

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Date Modified: 10/9/2006